Claims

1. A method of DC compensation for a direct conversion radio receiver, comprising the steps of:
determining the modulation extremes of a received modulated signal;
determining a DC offset for the signal from the modulation extremes; and
processing the signal to compensate for the offset.

2. A method according to claim 1, comprising determining the DC offset as substantially the mean of the signal amplitude at the modulation extremes.

3. A method according to claim 1, wherein the step of processing the signal comprises subtracting the offset from the signal.

4. A method according to claim 1, wherein the step of processing the signal comprises subtracting a weighted exponential function from the signal.

5. A method according to claim 4, wherein the weighting of the exponential function comprises the determined DC offset.

6. A method according to claim 1, wherein the receiver has an effective filter characteristic representing its frequency response, further comprising applying the inverse filter characteristic to the signal.

7. A method according to claim 6, including determining the modulation extremes from the inverse filtered signal.

8. A method according to claim 1, wherein the signal comprises an in-phase component of a modulated signal.

9. A method according to claim 1, wherein the signal comprises a quadrature component Q of a modulated signal.

10. A method according to claim 1, wherein the signal is GMSK modulated.

11. A computer program which, when run on a processor, carries out the steps of claim 1.

12. A direct conversion receiver comprising:
means for determining the modulation extremes of a received modulated signal;
means for determining a DC offset for the signal from the modulation extremes; and
means for processing the signal to compensate for the offset.

13. A receiver according to claim 12 having an effective filter characteristic representing its frequency response, further comprising inverse filter means to compensate for the filter characteristic.

14. A program to be executed by a digital signal processor in a direct conversion receiver, the receiver comprising a mixer circuit for providing quadrature related signals from a received modulated signal, a dc cancellation circuit for cancelling the dc component in the quadrature related signals and a digital signal processor for removing a residual dc component from the signals, said program being configured to cause the digital signal processor to determine the modulation extremes of the signals, to calculate a dc offset for the signals from the modulation extremes and to process the signals to compensate for the dc offset.